# PROJECT FOOD, LAND & PEOPLE (FLP) BRIEF DESCRIPTIONS OF LESSONS

## **Page**

## 1 1. The Plant and Me (PreK-3)

By discussing, observing, and role-playing, students learn that plants and people have similar needs for survival.

# **5** 2. **Seed Surprises** (PreK-3)

By sorting and planting seeds, students discover seeds come in a variety of sizes, shapes and colors, as well as produce plants.

## **9** 3. **Chewsy Choices** (PreK-4)

Students learn about the five food groups through the use of puppets and their participation in a play about dinner at Rachel and Brian's house.

# **27** 4. **Fruits and Veggies** (PreK-4)

Students identify and compare fruits and other edible plant parts through a fast-paced game.

# 35 5. School Ground Caretakers (PreK-4)

Students observe and collect items on the school ground, choose their own special place, and work with school groundskeepers to be respectful caretakers of their outdoor environment.

# **43** 6. **Let's Celebrate!** (PreK-6)

Students explore the role of celebrations in their own lives and in the lives of others and the important foods involved in those celebrations, with a focus on corn.

# **53** 7. **Seasons Through the Year** (PreK-6)

To build awareness of seasonal change, students use their own birth dates, a comparison of seasons in different settings, and self-made books.

## 61 8. Tomatoes to Ketchup, Chickens to Omelettes (PreK-6)

Students build connections between raw and processed food items by cutting out pictures, matching pictures, and making collages.

# 71 9. We're Into Pumpkins (PreK-6)

Through hands-on, interdisciplinary activities, students learn about pumpkins as fruits and as food sources.

# **81** 10. **Don't Use It All Up!** (PreK-12)

Students participate in a sponge demonstration to discover that people are consumers of resources and explore methods of conserving those resources.

## **91** 11. **Germ Busters** (PreK-12)

Through a controlled experiment, students learn one way bacteria can be spread and the importance of hand washing for personal hygiene and food safety.

# 103 12. Lunchtime Favorites (PreK-12)

Students trace the sources of their food from lunch to learn the interdependence of plants, animals and people. They explore the importance of eating a variety of foods from plants and animals and discover how culture influences food choices.

#### **113** 13. **Trash Bashing** (1-12)

By conducting a small group sorting activity, students learn the importance of reducing, reusing, and recycling solid waste. Students then develop plans to change personal behaviors.

## **125** 14. **Root, Root for Life** (2-6)

Students discover the importance of roots to plants, soil and people during hands-on learning-station activities.

# **139** 15. **Buzzy, Buzzy Bee** (2-7)

Students play a game in which they pretend to be honeybees and apple trees. In the process, they learn about plant pollination.

#### **149** 16. From Apple Cores to Healthy Soil (2-8)

A composting experiment reveals to students how soil organisms, temperature, air, and water are able to decompose organic waste and enrich soil.

# **161** 17. **Perc Through the Pores** (3-6)

By pretending to become soil particles and water droplets, students simulate soil particle sizes and their pore space.

#### <u>Page</u>

# **169** 18. Banking on Seeds (3-7)

The critical role that seeds play in the world is explored through creating a seed bank and comparing uses of seeds.

## **181** 19. Could It Be Something They Ate? (3-8)

Students experiment with the growth of microbes and predict who could become ill from eating contaminated food by analyzing the food-handling behavior of a group of picnickers.

# **195** 20. **Tree-mendous!** (3-8)

Students play a fast-paced word classification game that helps them gain an appreciation for the variety of ways people use and benefit from trees.

# **233** 21. Expression Connection (3-12)

Small groups of students play a word game that builds new connections between farming, food, land, people, and themselves. They then write poetry about those connections.

# **243** 22. Feed the Need (3-12)

Students experience first-hand the distribution of income in the United States and the world as it relates to buying food. They investigate local and international programs that work to feed hungry people, and they write an action plan for their involvement in a program.

# **257** 23. **Gala Fiesta Jamboree** (3-12)

Students explore the role of celebrations in diverse cultures, their class, and the local community. After interviewing community members about favorite celebrations, they research various cultures' harvest festivals and prepare a celebration presentation for the class.

# **273** 24. Investigating Insects (3-12)

Students become entomologists by observing insects in their nearby surroundings. After observing and analyzing, they learn by playing a game how some insect interactions can be useful to people.

# **285** 25. Your School Ground Through New Eyes (3-12)

Students develop and sharpen observation skills to discover new details about their school ground and form fresh perceptions of their outdoor space.

## **297** 26. **In Harmony** (4-6)

Students develop mapmaking, map reading, and graph reading skills as they learn the capabilities and limitations of our land resources by using a soil survey. In the process students begin to develop knowledge needed to build a foundation for understanding the complex issues involved in making land use decisions in harmony with the land's capability.

# **307** 27. **Amazing Grazing** (4-6)

Students learn about the efficient use of renewable resources to meet human need in this lesson. Five small groups of students build a food system to meet their needs, which is based upon the capability of their land resource, climate, topography, and economics. The lesson provides information that directs students to understand why grazing is an environmentally sound option in each scenario.

#### **325** 28. **Gifts from the Sun** (4-8)

Through creating and improvising, students learn the components and basic process of photosynthesis.

#### **337** 29. From Sea to Shining Sea (4-9)

Students complete a United States map showing the locations of the states, their capitals, and the top five agricultural commodities in each state. They then identify and graph the top five commodities nationally after compiling the information.

# **351** 30. **Till We or Won't We?** (4-9)

Students construct and perform experiments simulating rain on a field, investigating how soil preparation, tillage techniques, and mulches affect soil erosion and water runoff.

#### **363** 31. **Be Label Able** (4-12)

Students graph the weight of several nutritional components identified on cereal box labels to select the healthiest cereal. They use this information to design and market a new healthy cereal.

## **381** 32. **Breads Around the World** (4-12)

Students learn the cultural and nutritional significance of bread throughout the world by working in groups to solve a logic-matrix activity.

# **399** 33. **By the Way** (4-12)

Teams of students solve a mystery about cattle by-products. Students formulate questions about the mystery. Then they think critically about relationships among various products made from cattle.

## **Page**

#### **407** 34. Cleared for Takeoff (4-12)

Students learn about the important roles aviation plays in agriculture, as well as the requirements for a career in aviation.

#### **421** 35. **From Fiber to Fashion** (4-12)

Students study clothing labels, research fabric production, and evaluate consumer options for their clothing.

#### **435** 36. It All Starts with A (4-12)

Students conduct surveys to learn what agriculture provides to people. They organize, simplify, and communicate their findings using tallies, frequency tables, and histograms.

# **449** 37. Nail by Nail, Board by Board (4-12)

Students explore what shelters are made of, where building materials come from, and associated careers.

# **459** 38. **Step by Step** (4-12)

Students study the sequence of production to discover the resources required and the variety of careers involved to take a raw food from the farm to the consumer.

# **469** 39. What's the Shape of Your Diet? (4-12)

Students collect data on the foods they eat over a 24-hour period and compare their food consumption to the *Food Guide Pyramid* to determine if their food choices create a nutritionally sound diet.

## **487** 40. What Piece of the Pie? (4-12)

Students explore the economics of consumer food products by analyzing who gets what portion of the price we pay for our food.

# **505** 41. Why I Buy (4-12)

In this lesson students are made aware of the external influences they receive when making purchasing decisions. After examining those influences, the students will conduct their own consumer preference trials. After collecting, graphing and analyzing the data, students decide which brand of a product they will purchase and why.

## **515** 42. Calorie Counting (5-9)

Students discover how their actual caloric intake compares with their caloric expenditure and ways in which their choices of food and activity can affect their energy balance.

#### **531** 43. **Global Grocery Bags** (5-12)

Students learn why people around the world spend different percentages of their annual income on food.

# **551** 44. **Soil Is Not Trivial** (5-12)

Using facts about the Dust Bowl, students write questions and play a trivia activity focused around the establishment of a national soil conservation program and the importance of soil. Students then explore and/or develop a plan to address a local soil conservation issue.

## **567** 45. What Will the Land Support? (5-12)

Students play a board game to simulate changes in land use. They discover the effects of change on the carrying capacity of the land.

#### **583** 46. **Go, Go H<sub>2</sub>O** (6-8)

Students design, describe, create, and experiment with an artificial system of moving water from a source to an area of need, as in irrigation.

# **597** 47. **Mighty Macros** (6-12)

Students conduct simple food experiments and collect data about their personal food choices to learn how the foods they eat satisfy the body's nutritional needs for macronutrients: carbohydrates, proteins and lipids.

#### **617** 48. **Loco for Cocoa** (6-12)

Students discover how chocolate traveled the world by creating a time line and map, preparing and tasting chocolate as an Aztec drink, and playing a traditional Mexican rhythm game. Students learn how chocolate is produced from cacao, and where cacao is grown today. Students also use language to express their thoughts, feelings, and creativity about chocolate and its history.

# **635** 49. **To Whom It May Concern** (6-12)

After conducting research, students write a letter expressing their opinions about a controversial issue. Students either choose an issue or use the issue examples about the labeling of genetically engineered foods.

## **Page**

663 50. Six Billion and Still Growing (7-12)

Students graph historical and projected world populations to understand that human populations grow exponentially and examine the many circumstances that affect birthrates and death rates.

**687** 51. Less Elbowroom (7-12)

Students experience a simulation of progressive crowding as the population of an area grows. Students explore the issue of exponential growth and debate the issue of a world population explosion.

**711** 52. **Trading Favorites** (7-12)

Students use lines of latitude and longitude to locate homes where their trading partners live. The students explore global trade by assuming the identity of an exporter and importer. True-to-life scenarios are given to students to research in this lesson.

**727** 53. **Managing Pests** (8-12)

Students analyze the advantages and disadvantages of pest-management techniques and use a problem-solving model to evaluate alternatives for specific pest management issues.

**755** 54. Piecing Together Population Patterns (8-12)

Students analyze selected demographic data about various countries and regions of the world. They then prepare a group presentation about the implications of their findings on a specific country's food, economics, and natural resources.

**775** 55. **Cows or Condos?** (9-12)

After reading a case study, students use a problem-solving model to understand the complex issues of urbanization of agricultural land. Then they analyze similar situations in their areas and pose possible solutions.